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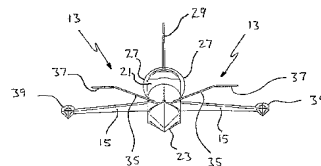
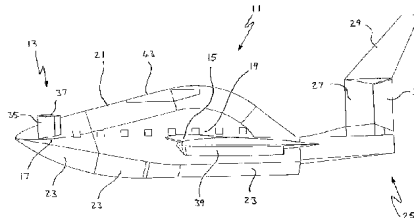
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(54) Title: WING-IN-GROUND-EFFECT CRAFT



(57) Abstract: An wing-in-ground-effect craft (11) having a loaded canard forewing (13) and a main forward delta configuration wing (15) attached to fore (17) and mid (19) sections of a body (21) respectively. The body (21) is formed with an integral planning hull (23) for amphibious applications, extending rearward to a tail section (25) which incorporates a ducted fan (27), and a vertical stabiliser (29). Rudder (31) is located in the exhaust of the ducted fan (27) for steering the craft (11), and serves as a stator to reduce spiral induced in the airflow exiting the duct (27). The canard forewing (13) has about 12% of the area of the main wing (15), and has inner portions (35) having a dihedral configuration disposed at a first angle of inclination from the vertical of 68° (equating to a dihedral angle of 22°), and outer portion (37) disposed at a first angle of inclination from the vertical of about 91° (equating to an anhedral angle of about 1°). The inner portions (35) have an angle of attack of 7.5%, while the outer portions (37) have an angle of attack of 4.5°. The main wing (15) has a flat to slightly anhedral configuration and an angle of attack of from 4° to 4.5°. The main wing (15) incorporates a pontoon float (39) attached on the outer end of each main wing (15). The canard forewing (13) has control surfaces in the form of elevons (41) attached behind the inner portions (35).

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